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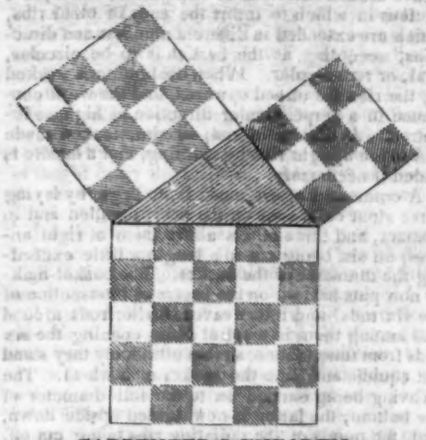


CARPENTER'S THEOREM.

The principle here illustrated, when discovered by Pythagoras, more than four hundred years before Christ, was considered so important as to occasion the sacrifice of an hundred oxen. It is certainly not less, probably more, important now. The principle, or truth is, that in every right angled triangle, a square formed upon the longest side, or hypotenuse, is exactly equal in surface to the two squares upon the other sides. In the figure above, the largest square contains twenty-five of the small squares. The others are sixteen and nine, making also twenty-five. No matter what the shape of the triangle, if it contain one right angle, the square of the hypotenuse will, in every case, be exactly equal to the sum of the squares of the other two sides.

This can be shown, in a very agreeable exercise for children, by cutting twenty-five half inch or inch squares of dark or light paper, and pasting them on to three large squares, of different colored paper, of three, four, and five times the diameter of the small squares; and then connecting the whole to a triangle, with sides in the same proportions. The numbers, six, eight, and ten, for the division of the squares, and for the sides of the triangle, can also be used with convenience. The fractional parts connected with most numbers, as used in this illustration, render them less convenient in practice, though always true in principle.—*Holbrook's Self Instructor.*

BENEFITS OF INVENTION.

The benefits conferred upon civilization by inventions in mechanics, may almost be said to be civilization itself; as almost every remove from barbarism has been consequent upon some new application of the mechanic powers. Science has advanced but as mechanism has led her forward, and refinement is nowhere found but in the garb furnished from the shop or factory: indeed is it a truth that the gentleman is known by his cloth:—purple and fine linen was the vesture of power and wealth in the days that consecrated Palestine a holy land; and the noble and base born were distinguished by the blazonry of armor through centuries of wars to rescue that land from the sway of the infidel.

The Pyramid and the Tomb are the records of Egypt's greatness. The history of mighty Babylon is an account of massive walls, lofty towers, and hanging gardens; her luxuries and magnificence are noted, and her manufactures of linen, cotton and silk extolled. Some vast remains of tower and palace—confused heaps of shapeless rubbish—alone mark the site of the greatest city of the world. The abandoned city of the desert, where temple, theatre and palace, hewn in solid rock, yet perfect, identifies the place and greatness of Petra. Greece and Rome are linked to us by their architecture and sculpture, whilst the barbarian Goth has left us the bower-shaped arch, clustered pillar, and budding spires, as his memento of primitive rudeness and ultimate grandeur. On our own continent, the ruins of cities, sculptured palaces, idols, altars, and unread hieroglyphics, mounds and fortifications, spread over thousands of miles of territories, excite our wonder and start the inquiry, "whose were these?" to which echo alone replies. The Celestials have invented nothing but *small feet* for their women in ages; hence they, though well skilled in the handicraft of the mechanism of their fathers, have progressed none in civilization, power, or greatness.

The invention of printing added a new era to civilization, and placed the means of knowledge before millions to whom before it was entirely shut out. The invention of the paper making machines extends that means to other millions by the cheapening of the material upon which the printer spreads out the facts necessary to such knowledge, and the printing machine adds its millions by the facility with which it multiplies copies of those essentials to general intelligence.

The steam engine, beside its agency in expediting and cheapening the operations above noted, sends the thought bearing missions with electric speed in every direction—rays of mental light from an *invented* luminary. Distant nations it brings together as neighbors, and the policy and operations of each before the whole, as soon as they are promulgated at home. It lessens the toil of mankind, and allows more time for mental culture. It cheapens the necessities of man by facilitating their production, and adds innumerable luxuries and conveniences to every member of community.

By the facilities thus afforded for the dissemination of truth, political rights are better understood, the iron bindings of despotism are being loosened, slavery is being hedged about by popular opinion and driven within narrow limits, oppression yields (perhaps slowly, but surely,) to the continued assaults of moral power concentrated against it, philosophy and learning are broader spread, and reason more surely asserts her sway.

Every engine of war which invention has added, more destructive than before known, lessens the chances of war and the destruction of human life. The pike and battle axe of the mailed warrior of old was far more destructive to the serried hosts who met hand to hand, than is all the enginery of the marshaled battallions in modern battle; rocket and mortar, howitzer and Paixhan, make generals more wary and captains greater generals, and better engineers—builds stronger walls and fleeter ships, but destroys less life.

The invention of the cotton gin and spinning jenny clothed the civilized world at less than a tithe of their former labor, whilst the power loom lessened it to another tithe, leaving the wives and daughters time for that mental cultivation unknown to the females of any land before this inventive age. The result of the general education of the mothers of the next generation upon the men of the coming age no one can calculate, and the constantly increasing channels of knowledge forcing themselves through every down, to every door, forbids the idea of an ignorant family.

The railway and steam ships, modern inventions, are patient engines in the cause of civilization and peace, threading empires, alarming nations, and arousing a world at the least approach to civilized warfare. Experiments in destruction by armies are only allowed to be tried upon the savage and barbarian upon the outskirts of the Christian world, they do not use steam yet and have no powerful friends to mediate between them and their enlightened enemies.

But for the inventions of mechanics astronomy would have now been little else than vague theory; chemistry and natural philosophy undemonstrated and unknown, and mathematics uncertain.

Commerce is only where mechanism has made it, and agriculture has been made a civilized employment through its advancement; governments are only strong by the inventions of their artisans, and individuals are helpless and defenceless, ignorant and degraded as they lack the benefits of invention. T.

BASKETS AND THEIR MATERIALS.

The details given in a recent paper, on the economical uses of the willow, were sufficient to show that the root, the trunk, the branches, the twigs, the leaves, and the seed-envelope, were all applied to useful purposes by man; but it was intimated that the employment of the young shoots of one or two species for basket-making was the most extensive application of the plant in practice.

That basket work, constructed of this or some other kind of pliant shoot, has been known in various ages and nations, we have abundant evidence. In ancient times the shields of soldiers were constructed of wicker-work, either plain or covered with hides. In Britain, the wicker boats of the natives, covered with the skins of animals, attracted the notice of the Romans. Herodotus mentions boats of the same kind, but coated with bitumen, as being in use on the Tigris and Euphrates. In may parts of Hindustan at the present day the natives are accustomed to cross rivers in round basket-boats, from three to fifteen feet in diameter, one of which can be made by six men in as many hours. In various parts of the world, houses, cottages, carriages, fences, gates, and many other structures, have been made of basket-work.

In England at the present day this kind of fabric is principally employed for baskets only, and the material used is the *osier*, or young willow-shoot. Holland produces these osiers in great abundance: they not only furnish a useful material for baskets, but are valuable as a preservative for the banks of the canals with which that country is intersected. The English basket-makers used to receive their principal supply of osiers from Holland and France; but when, during the revolutionary war, the freedom of commerce between the countries was interrupted, attention began to be more particularly paid to the culture of this plant in England. Very little was known of the matter in England, and less in Scotland; and there upon the Society of Arts offered premiums to those cultivators who should raise the greatest quantity of osiers (not being less than six thousand plants) per acre. A great impetus was thus given to this branch of agriculture. Many kinds flourish in the most barren kind of peat; but they are coarse and spongy, have a thick pith, and are very perishable, and are only fitted for the coarser sort of baskets. The best species for the finer kind of work is that called the French willow; it is rather of slow growth, but extremely taper, pliant, close, grained; tough, and durable. This kind is still procured in large quantities from the Continent, since the attention of English growers is more directed to the less delicate species.

The best season for cutting the osiers is said to be the autumn, after the fall of the leaf: because the buds which are left to produce the shoots for the succeeding crop immediately begin to swell, and grow in strength during the winter, and consequently they make much earlier and stronger shoots in the following spring. Immediately after cutting the rods they are tied up in bundles, each generally about an ell in girt; and if they are not intended to be used green, that is, with the bark on, they are set on their thick ends in standing water to the depth of three or four inches. Here they remain during winter and spring, till the shoots begin to sprout, which in the neighbourhood of London, generally happens about the end of February. Sometimes it happens that osiers are cut with the leaves on, in which case they are not tied up in bundles, on account of the fermentaion that would be produced by binding them closely together in that state; but they are set up thinly and loosely on end, their tops leaning aginst a rod supported on two props.

Mr London states that in Cambridgeshire, when a basket-maker purchases green rods, he measures the bundles or bolts by a band an ell long, or a yard and a quarter; which band, previously to tying it round the rods he makes at the point to wich the given length extends. With this he binds the bundle as soon as it appears large enough to fill the band, and afterwards completes the bundle by pushing under the band as many rods as he can; for this purpose the large rods are laid aside, from their filling up the given space more quickly than the smaller ones. The bundles are wedged close by tying up a small armful (called a *calf*) and placing it in the middle of the bottom of the bundle, and then driving it up into the middle of the bundle by striking the end against the ground. A machine called a dumb-boy," made of wood and rope, is used by some purchasers for compressing the greatest possible number of rods into a bundle; and another machine, called a "cow," is used with still greater effect for this purpose. This is a curious example of the effect produced when an article sold by the bulk is made up into parcels by the buyer and not by the seller; it is easy to see how this system affects the mode in which the bundles are packed. Common green osiers sell at from eighteenpence to three shillings per bundle.

For finer work the rods are 'peeled' before being made up into bundles; a simple operation generally done by infirm old people at so much per bundle. The apparatus for peeling consists of two iron rods, about sixteen inches long and half an inch thick, tapering a little upwards, and welded together at the end, which is sharpened. When the instrument is inserted in a piece of firm ground, the peeler sits down opposite to it, takes the willow rod or twig in his right hand by the small end, and puts a foot or more of the thick end, into the instrument, the prongs of which he presses together with his left hand, while with the right he draws the willow towards him, by which operation the bark is at once separated form the wood; the small end is then treated in the same manner, and the peeling is completed. Another mode is, to fix a plank on legs at a conveient height, so as to form a stool or samll bench, having holes bored in it; into these is put a stick with the upper end cleft, and through this cleft the willow twigs are drawn to separate them from the bark.

After being peeled, the willow-rods will keep in good condition for a long time, till a prorper market is found for them. They are tied up in bundles rather smaller then those of the green rods, and in this state sell in the London market at from five to seven shillings per bundle; being reckoned in the large way by the 'load' of eighty bundles, the green rods being so by the score of bundles.

The occupation of making basket from the willow-twigs thus produced is sufficiently simple when no beauty of apperance is required. In most parts of Europe it was formerly understood by every country labourer, and practised by him for himself or his master, as it still is in Russia, Sweden, and other countries of the North. In Britain, and especially in Soctland, it was the custom some years ago for every gardener to understand basket-making, and it generally formed part of his occupation in winter evenings. This is not so much the case now; but still it has been recommended that every gardener, forester, and woodman ought to know how to make a common garden basket, and more especially those wicker work structures which are now in very generally use for the portection of half-hardy trees and shrubs when young and planted out in the open garden.

The osiers for basket are, as we have said, used either peeled or with the peel on, and they are used either whole or in 'splits,' or in 'skains,' according to the quality of the work required. A split is a rod divided into either two or four: in the former case a common knife is sufficient; but in the latter the rod is forced against the end of an instrument consisting of four cutting blades at right angles, whereby the rod becomes separated into four. The skains or thin ribands of willow, produced by passing the splits though a kind of shave or plane, which cuts them up into strips of any required thickness. In the finer kinds of baskets the frbric is formed of sections, split of various thicknesses, coloured, plaited, or plain; and sometimes, to produce a diversified effect, the skains are smoked and dyed either of dull or brilliant colours, and then judiciously intermixed.

So far as it is practicable to describe the manipulations of basket-making without a series of illustrative figures, we may select two or three different modes of making common cheap garden-baskets, as a type whence the more elaborate kinds may be judged. Baskets may be deemed a woven structure in which the larger osiers constitute the *warp* or skeleton, and the smaller osiers the *woof* or wattle; consequently we have to bear in mind these two elements in almost every basket. Common baskets of a roundish form, as made in Scotland and in Germany, have two principal ribs,—a vertical rib or hoop, the upper part of which is to form the handle, and a horizontal hoop or rim, which is destined to support all the subordinate ribs. For each of the two main ribs an osier rod is first bent to the circular from, and the ends fastened by nails or wire. The two hoops thus made are then joined together at right angles, and fastened by wire at the points of intersection; one hoop being for the rim, half of the other hoop for the handle, and the other half for part of the framework of the intended basket. The operation of 'wattling' is then commenced by taking the small end of an osier and passing it once or twice round the cross formed by the points of intersection; after which a few secondary ribs are formed on each side of the vertical main rib. The wattling is then proceeded with a little farther, when two or more secondary ribs are introduced; and this process is continued till a sufficent number of subordinate ribs are put in to support the wattling or *woof* of the entire structure. The distance of the subordinate ribs apart at the widest part may be from three to four inches. When the form of the basket is a square or parallelogram, exactly the same process is pursued; but greater care and skill are required in bending both the main ribs and the subordinate ribs to the required forms, the rod being often split for this purpose, and laid with the pith-side inwards.

Another Scotch mode is to lay two stout osiers on the floor, at right angles to each other, and to weave around them one or two smaller osiers, as a nucleus in which to insert the ends of other ribs, which are extended in different numbers and directions, according as the basket is to be circular, oval, or rectangular. When the bottom is worked in, the ribs are turned upwards, and the work continued in a perpendicular direction as high as required. A horizontal rod, or rim, is then made fast to the upright ribs by wattling, and a handle is added if neccessary.

A common English mode is, to begin by laying three stout ozier-rods on the floor, paralled and in contact, and three others above them at right angles, all six being cut to a length a little exceeding the diameter of the basket. The basket-maker now puts his foot on the centre of intersection of the six rods, and interweaves smaller rods around and among them in a spiral form, opening the six rods from time to time, so that ultimately they stand out equidistant, like the spokes of a wheel. The weaving being carried on to the full diameter of the bottom, the latter is now turned upside down, and, the points of the radiating ribs being cut off, a willow rod is inserted on each side of each rib, and turned upwards. These upright rods become a *warp*, into which smaller rods can be woven to form the side of the basket. The upper ends of the rods are finally brought down and plaited into a sort of rim or edge, and a handle is added if necessary.

All these methods are for baskets of the commonest kind; but they involve the simple principles whereon, when modified, all basket-work is conducted.

THE LABORING CLASSES OF EUROPE AND AMERICA.

Extract from an Address before the Albany County Mechanic's Association. (Continued)

BY E. G. SQUIER.

Here, then, with this single exception, we have none of those false, unnatural distinctions which are alike the cause and effect of European degradation. Thanks to our glorious ancestors, it only remains for us to improve and perfect the glorious system which they committed to our hands; to cherish those principles which they maintained with their blood. Equality of rights and privileges—these are at the foundation of our social and political institutions; and if any class of men do not hold that position in our social organization which they should, or to which they are entitled, the fault is with themselves. Those causes which bind down the laborers of Europe do not, cannot exist here; and if our government discharges its duty faithfully, the laborers of America must be wholly unaffected by their existenceabroad. It is true, that such are the connections that have lately come to exist between us and the nations of Europe, that it has been found neecssary to adopt some means of guarding the American laborer from some of the evils which flow from the peculiar situation of their laboring classes.

The protection which our government is bound to give to every portion of our people, and for which purpose it was organized, has not, should not be refused. The interests of the great social body of America demand that it should be extended to them. "While," in the words of another, "no one can doubt the mutual advantages of a judiciously conducted commerce, or be insensible of the good which has resulted to humanity, from the cultivation of a peaceful and friendly intercourse with other climes, it is yet beyond question that the true principle of American policy, to which the whole spirit of our institutions, not less than the geographical features of our country invites us, is

separation from Europe. Next to *union at home*, which ought to be called, not so much the essential condition of our national existence, as our existence itself, separation from all other countries is the grand principle by which we are to prosper. It is towards this that our efforts, public and private, ought to tend; and we shall rise or decline in strength, improvement and worth as we obey or violate this principle. This is the voice of nature, which did not in vain disjoin our continent from the old world, nor reserve it beyond the ocean for fifty centuries, only that it might become a common receptacle for the exploded principles, the degenerate examples, and the remediless corruptions of other states. This is the voice of our history, which traces every thing excellent in our character, and prosperous in our fortunes, to dissent, nonconformity, departure, resistance, revolution. This is taught us by the marked peculiarity, and essential novelty which display themselves in our whole physical, political and social existence.

I shall now take leave of Europe, and proceed to the consideration of the question, how shall the high station occupied by the mechanics and laborers of America be maintained and improved?

I have shown you the causes, the operation of which, in Europe have produced the degradation and ignorance of the laboring population, to be in its institutions, its prejudices, distinctions, and policy. On the other hand, I have shown you the utter difference which exists here, the entire absence of all these causes; owing in a great measure to the peculiar position of the early settlers of our country, and their liberal and extended ideas of government and man, his rights and his privileges. Our institutions, our government, and our general policy, are not only different from those of foreign lands, but most favorable for the development and improvement of man, whatever his occupation, whatever his condition. There is not an avenue to wealth or distinction which is closed—not a post unattainable. Here is a fair field to all who are willing to labor in whatever vocation they please; and the rewards of diligence are ample and secure. But even with all the advantages afforded them, with every honorable inducement beckoning them onward, do the mechanics—the laboring classes of our country—occupy the position which they should, and to which they are entitled? Although occupying a position infinitely superior to the laboring population of any other country on the globe, have they attained to that point to which they may, to which they ought aspire? Is there not a neglect of their true interests; a disposition to lie quietly down in supine inactivity, as if the prize were already won, the goal attained, the great work accomplished?

Humiliating as must be the answer, I am constrained to reply in the affirmative. With the road clear before them, with nothing but exertion required on their part, the laborers of America have not discharged the great duties which they owe to themselves as individuals, as men, and above all, as American laborers. To them, as constituting three-fourths of our whole population, are committed the highest and dearest gifts of Heaven. To them is also committed the solution of the grand question, "Is man, the people, capable of self government?" With them, as constituting by far the greatest portion of the American people, rests the destiny of our country; and to them, for the same reason, the world looks with an eye of inquiry and solicitude. When first the "star in the west" arose, and a people, young in years, though mighty in resources and indomitable in spirit, broke from the thrall that bound them, and stood forth in the front rank of nations, free and independent, many were the prophetic warnings that the beautiful fabric would not stand the test of time and experience; and the aristocracy of Europe pointed with a sneer on their lips, to the ruins of those republics which had fallen from their own weight, and predicted that ere a single century had rolled its round, the grand experiment in America would add one more proof, one more example of the fallacy of the doctrine of equality, and political and social freedom. To them, at the same time, the philanthropists of the world—the men whose hearts were bleeding for the cause of suffering humanity, turned with joy and hope—hope mingled with fear—joy shaded by uncertainty. And it is now for the laborers of America, God's own noblemen, to discharge with fidelity the glorious trust committed to their hands; to show the world the truth and efficiency of the principles they have adopted, give the lie to the croaking prophecies of tinselled nobility, and set the world a proud example to all future time—a living refutation of the doctrine of incapability. For these reasons, for their own sakes, they should now be active, vigilant, and press boldly onward to the high position within their reach, but to which they have not yet attained.

ORGANIZATION OF INDUSTRY.

BY MEMBERS OF THE ASSOCIATION.

CHARACTER OF CHARLES FOURIER.

He was born in the year 1772, in the town of Besancon, in France—was the son of a draper—possessed of an organization naturally susceptible of shunning indiscriminate intercourse with society. He appears to have acquired a calm and reserved air of abstraction, which might have enabled him to pass through the journey of life unnoticed and uncared for, were it not for the mission he undertook to fulfil, and by which he has justly acquired the title of the *Founder of Socialism.*

Fourier was said to have lived in the world, but was not of the world. A man of close observation and acute judgment, he walked through society without mixing with it. Like a traveler visiting a strange land, he took notes of what he saw. He wept over the misery which surrounded him—he sympathized deeply with the sufferings of humanity—he traced the causes which produced them, and found, to his infinite joy, that they were not indelibly imprinted in the constitution of the universe, and that ignorance alone was the prevailing cause of misery. Having discovered the cause of evil, he planned with astonishing perseverance the remedial system which he advocated, and, unfriended by a single individual, but scoffed at by all, he proclaimed it to his fellow citizens. And that system, which was looked upon contemptuously by all, attracts the favorable regard of some of every class of society in France, (and is doing the same in this country,) from the working artisan of the shop, to Louis Philip and *his sons in the palace* of the Tuilleries.

He began his pursuit of truth in *absolute doubt*, or, to use his own words, *du doute absolu et Je l' ecart absolu.* Thus armed he was enabled to look at things as they really stood, and not as they appear to those who greedily received, without reflection, any opinion or ideas which floated currently in society. He saw adultery reveling under the sanction of the marriage tie, corruption pervading the political relations of society—mediocrity reposing under the shade of successful intrigue—he saw humanity wasting its energies in vain struggles, without any profitable results—he saw revealed to him the disappointments, the sufferings, the miseries, the paltry ambition, the false joy, the laugh moistened with tears. Thoroughly convinced of the enormity of the evil, Fourier laid hold of two grand ideas; the one of *pain*, either physical or moral, (*douleur physique or moral,*) as the sign of error—the other of *pleasure*, (*la satisfaction or le plaisir,*) as the sign of truth.

He published his first work in 1808, entitled the Four-Fold Movement, and only ventured to give the public his first name, Charles, not daring to sign his own name to his own book, being but a commercial clerk at that time. In 1822, fourteen years after publishing his first, he published a treatise on Agricultural and Domestic Associations; this work was announced in six volumes, of which only two were published—these, however, contain the more valuable development of his theory. The other works he published was the New Industrial World, in 1829, and a pamphlet against St. Simonism and Owenism; also, various articles in the *Phalanstere*, a paper printed in Paris.

Previous to 1832 he was employed as a letter copier, and not until this period, when he was about sixty years of age, was he enabled to retire from business, upon a small income of about four hundred dollars a year. After this the time arrived when nature called Fourier and claimed him for her own. It was on the 10th of October, 1837, in the sixty sixth year of his age, that, after an illness of eight months, he vanished from his disciples, leaving his mortal remains to enter into new combinations, according the mysterious processes of nature. True, life has forsaken his body, and death has purged the dross which enveloped him while living, but all that was valuable, all that was bright, all that was holy, (and a holier mission than Fourier sought to fulfil was never yet attempted by man,) still survive in the affection and sympathy of his followers.

In life he was a living epistle of devotedness to the cause of humanity, and in death he pleads eloquently to each of us. The times in which our lot is cast are pregnant with the germs of futurity. A new philosophy has thrown its mantle over the world, and it devolves upon us to be the happy instruments of its ultimate supremacy. Never, at any period, did our social economy exhibit such features of rapid transition as the present systems of human creation, which have long held an undisputed sway over the minds of the masses, now begin to fade and crumble before the magic touch of free inquiry, and old things are rapidly passing away.

Fourier was of small stature and of spare appearance—in his countenance there was a nobleness, mingled with an expression of grief which touched the heart of the spectator. In his life time he was despised and rejected by the world, and, as is too often the case, we shall probably behold his countrymen endeavoring to atone for their neglect, while he was living, by heaping marble upon him when dead.

Let us anticipate the event, and strive to emulate, with the friends of Fourier in France, in the good and glorious work of building up Associations in the broad and fertile country we inhabit—making them eternal monuments in commemoration of him who planned them, and blessings to those who inhabit them, when the region that encircles these happy folds can be cultivated to perfection, rewarding the industrious with abundance of *rich gifts* from nature's teeming store, and yielding peace and tranquility to the human mind.

For this purpose the friends of Association in Albany have organized themselves into a society, to discuss principles of social reform, and adopt that which is the most practicable. Members joining our society are not required to subscribe to any system but the rules which regulate our body as a society here—yet it is hoped that some, if not all, will ultimately join for practical measures. Our number at present is about 80, and out of this number about 30 have taken stock in the Sylvania Association, to the amount of several thousand dollars. All who feel an interest in this great movement are invited to *come and join.* The shares are but $25 each, and the security is the lands, houses, stock and implements of the domain. The property of the German Association in Pennsylvania has increased in value 100 per cent within the last year, and who can doubt that this will increase as rapidly under improvement. Other associations, also, in successful operation are proof positive of the feasibility of the system. All that we require now is sufficient capital.

For a digest of the principles of Association, we would recommend the pamphlet of Mr. Brisbane, recently published; a very excellent work, which should have the attention of every thinking mind.

Our society, which meets every Monday night in the Washington Temperance Hall, at 7 o'clock affords an opportunity to all who feel an interest, of attending the lectures and essays delivered, explanatory of the doctrines of Association. Subscriptions to the Sylvania stock are then and there received.

THANATOMETER.—A letter from Berlin speaks of an invention by Dr. Nasse, professor of the university of Bonn, to which he has given the name Thanatometer, and which furnishes immediate and positive evidence whether life be extinct in the animal subject or not.

THE MYNSTRELLE'S SONGE.

The following *songe* is from the tragedy of *Ælla*, by an unknown author, but ascribed both to Chatterton and Rowley. It is a beautiful specimen of the antique:

O! synge untoe mie roundelaie,
O! droppe the brynie teare wythe mee,
Daunce ne moe at hallie daie,
Lycke a reynynge ryver bee;
Mie love ys dedde,
Gon to hys death-bedde,
Al under the wyllowe tree.

Blacke hys cryne as the wyntere nyghte,
Whyte hys rode as the summer nowe,
Redde hys face as the mornynge lyghte,
Cald he lyes ynne the grave belowe;
Mie love ys dedde, &c.

Swote hys tyngue as the throstles note,
Quycke ynn daunce as thought canne bee,
Defte hys taboure, codgelle stote,
O! he lyes bie the wyllowe tree;
Mie love is dedde, &c.

Harke! the ravenne flappe hys wynge,
In the briered delle belowe;
Harke! the dethe-owle loude dothe synge,
To the nyghte-mares as heie goe;
Mie love ys dedde, &c.

See! the whyte moone sheenes onne hie;
Whyterre ys mie true loves shroude;
Whyterre yanne the morynge skie,
Whyterre yanne the evenynge cloude;
Mie love ys dedde, &c.

Heere uponne mie true loves grave
Schalle the baren fleurs be layde,
Nee one hallie seyncte to save
Al the celness of a mayde;
Mie love ys dedde, &c.

Wythe mie hondes I'll dente the brieres
Rounde his hallie corse to gre,
Ouphante fairie, lyghte your fyres,
Here mie bodie still schall be;
Mie love ys dedde, &c.

Comme, whythe acorne-coppe and thorne,
Drayne mie hartys bloode awaie;
Lyfe and all ytts goode I scorne,
Daunce bie nete, or feaste by day;
Mie love ys dedde, &c.

Waterre wythes, crowned wyth reytes,
Bere mee to yer leathalle tyde.
I die—I comme—mie true love wayte—
Thos the damselle spake, and dyed.

From Farnham's Travels in the Rocky Mountains, and Oregon Territory.

A CONVERTED INDIAN.

We saddled early, and ascending for two hours a line of gentle grassy elevations, came to the beginning of the northwestern declivities of the Blue Mountains. The trail ran down the ravine of small brooks flowing northwest, and occasionally over high swells which stretched down the plain, that lies about the southwestern branches of the Wallawalla river, and halted to dine. In the afternoon we struck off northwesterly over the rolling plain. The soil in the depressions was a light and loose compound of sand and clay, and sparsely covered with bunch grass. The swells were of gravel, and generally barren; trees on the brooks only, and these few, small, and of little value. About three o'clock we came into the camp of a middle aged Skyuse Indian, who was on his onward march from the buffalo hunt in the mountain vallies east and northeast of fort Hall. He was a spare man of five feet eight inches, dressed in a green camlet frock coat, a black vest, striped cotton shirt, leather pants, moccasins, and a white felt hat. They had two children, boys, neatly clad in deerskin. His camp equipage was very comfortable—four or five camp kettles with tin covers, a number of pails with covers, a leathern tent, and an assortment of fine buffalo robes. He had had a very successful hunt. Of the 17 horses in his caravan, six were loaded with the best flesh of the buffalo cow, cured in the best manner; two others bore his tent, utensils, clothing, robes, &c.; four others were ridden by himself and family; the five remaining were used to relieve those that from time to time might tire. These were splendid animals, as large as the best horses of the States, well knit, deep and wide at the shoulders, a broad loin, and very small lower limbs and feet; of extreme activity and capacity for endurance.

Learning that this Indian was going to Dr. Whitman's mission establishment, where a considerable number of his tribe had pitched their tents for the approaching winter, I determined to leave the cavalcade and accompany him there. My guide, Carbo, therefore, having explained my intentions to my new acquaintance, departed with the remainder of his charge for fort Wallawalla. Crickie, (in English, "poor crane,") was a very kind man. Immediately after the departure of Carbo and company, he turned my worn out animals loose, and loaded my packs upon his own, gave me a splendid saddle horse to ride, and intimated by significant gestures that we would go a short distance that afternoon, in order to arrive at the mission early the next day. I gave my assent, and we were soon on the way. Our course was northeasterly, over sharp swells, among which ran many clear and beautiful brooks; soil, gravel, loam, sand and clay, and well covered with dry bunch grass, incapable of producing the grains without irrigation. The swells and streams run northwesterly from the Blue Mountains. Our course was diagonally across them. Having made about ten miles at sunset, we encamped for the night. I noticed, during the drive, a degree of forbearance towards the animals whenever they erred, and of affection and benevolence towards each other, in this family of savages, which I had never before observed in that race. When we halted for the night the two boys were behind. They had been frolicking with their horses, and as the darkness came on lost the trail. It was a half hour before they made their appearance, and during this time the worthy parents exhibited the most affectionate solicitude for them. One of them was but three years old, and was lashed to the horse he rode; the other only seven years of age. Young pilots in the wilderness at night! But the elder, true to the sagacity of his race, had taken his course, and struck the brook on which we had encamped, within three hundred yards of us. The pride of the parents at this feat, and their ardent attachment to their children, were perceptible in the pleasure with which they received them at their evening fire, and heard the relation of their childish adventure.

The weather was so pleasant that no tent was pitched. The willows were bent, and buffalo robes spread over them. Underneath were laid other robes, on which my Indian host seated himself, with his wife and children on one side and myself on the other. A fire burned brightly in front. Water was brought, and the evening ablutions having been performed, the wife presented a dish of meat to her husband, and one to myself. There was a pause. The woman seated herself between her children. The Indian then bowed his head and prayed to God! A wandering savage in Oregon calling upon Jehovah in the name of Jesus Christ! After the prayer, he gave meat to his children, and passed the dish to his wife.

While eating, the frequent repetition of the words Jehovah and Jesus Christ, in the most reverential manner, led me to suppose they were conversing on religious topics; and thus they passed an hour. Meanwhile the exceeding weariness of a long day's travel admonished me to seek rest.

I had slumbered I know not how long when a strain of music awoke me. I was about rising to ascertain whether the sweet notes of Tallis's Chant came to these solitudes from earth or sky, when a full recollection of my situation, and of the religious habits of my host, easily solved the rising inquiry, and induced me to observe instead of disturbing. The Indian family was engaged in its evening devotions. They were singing a hymn in the Nez Perces language. Having finished it they all knelt and bowed their faces upon the buffalo robes, and Crickie prayed long and fervently. Afterwards they sang another hymn and retired. This was the first breathing of religious feelings that I had seen since leaving the States. A pleasant evidence that the Oregon wilderness was beginning to bear the rose of Sharon on its thousand hills, and that on the barren soil of the Skyuse heart was beginning to bud and blossom and ripen the golden fruits of faith in Jehovah, and hope in an after state.

THE PLANET JUPITER.

This is the largest planet that has been discovered in the solar system, and from its superiority of size the name by which it is known was given it, Jupiter, the most distinguished of the heathen deities. It is 490,000,000 of miles from the sun. It moves round the sun in little less than 12 of our years. It turns on its axis in 9 hours and 56 minutes. The length of a day or a night there can be but about 5 hours. The axis has no inclination, and in consequence there is no change of seasons; in the polar regions there being perpetual winter, and about the equator perpetual summer. It is about fourteen hundred times larger than the earth. What a vast region for the residence of rational beings! Perhaps it is inhabited by a higher order of intelligences than that found on this earth. It is much colder there, however, than here, the heat and light of the sun being about 25 times greater on the earth than on the planet. It has four moons, which move around it as our moon does round the globe on which we live. Their eclipses have been calculated by astronomers. The appearance of Jupiter when seen through a telescope is interesting. Several belts or bands are generally seen extending across its disk. These are changeable, and are supposed to be clouds floating in its atmosphere. It reflects a whitish but very beautiful light to us. It is at present like Venus morning star. How interesting, "to consider the heavens, the work of God's fingers, and the moon, and the stars which he has ordained." A knowledge of the works of the Almighty shows us his wisdom, intelligence, power and goodness. The nations of the earth have in these a demonstration not only of his attributes, but of his eternal Godhead so that if they worship idols "they are without excuse."

[Exeter News Letter.

BUSINESS MEN OF NEW YORK.—Preserved Fish commenced life as an apprentice to a blacksmith, and his next situation was that of a seaman on board a whaling ship. From being a hand before the mast, he rose to be a mate, and finally a commander, and in this hazardrus pursuit amassed the foundation of his fortune. Saul Alley was bound, when a small boy, apprentice to a coachmake. During his apprenticeship his father died, and left him totally dependant on his own exertions. The very clothes he wore he was obliged to earn by toiling extra hours, after the regular time for leaving off work had passed. The foundation of his fortune he acquired by the exercise of frugality and prudence while a journeyman mechanic. Cornelius W. Lawrence, late mayor of New York, and now president of the Bank of the State of New York, worked many a long day in the rain and sunshine on Long Island. There were few lads within twenty miles of him that could mow a wider swath, or turn a neater furrow. These men have been the architects of their own fortunes; they have earned them by the sweat of their brows; and their very wealth, besides the other means of doing good to their fellow men which it puts in their power, is, in itself, a perpetual stimulus to the mechanic and artisan to earn a similar reward by simular frugality, industry and perseverance.—*Hunt's Merchants' Magazine.*

PRENTISS'S RULE

For calculating Interest for Days, at 7 per cent.

Multiply the given sum in Federal money, by half the number of days given, and divide the product by 26, and the quotient is the interest.

Or multiply by one fourth the number of days, and divide by 14, and the quotient is the interest.

Or multiply by the whole number of days, and divide by 52, and the quotient is the interest.

A moment's reflection will show the arithmetician that the principle of the above rule is perfectly self-evident, and it is the easiest, the most accurate, and most useful rule for computing interest by days.

This rule gives the interest exactly for 364 days in a year; and, if necessary, after finding the interest as above, subtract the 365th part therefrom, and the interest for the proportion of 365 days is obtained.

ALBANY, THURSDAY, APRIL 13, 1843.

☞ Our agents for the city of New York, are Messrs. Wells & Webb, 42 Ann st., and Mr. J. C. Wadleigh, 459 Broadway, Periodical and Newspaper Depot.

☞ Our agents in different parts of the state are requested to ascertain whether any of those, whose subscriptions are about to expire, wish to renew; as we have not otherwise the means of knowing their intentions, and discontinue all papers when the time is up for which payment is made.

EGYPTIAN WORKS OF ART.

This country, about five hundred miles in length and two hundred and fifty in its greatest breadth, is particularly noted for having been the seat of the arts and sciences, whence Greece and other antient nations derived them. We noted the efforts made by the present pasha to restore the country to some degree of prosperity. It is not the work of a single ruler however that can restore a last people like the Egyptians, sunk by ignorance and bondage to the lowest stage of human existence. It will require the active exertions of many patriotic men for several generations to awaken that love for science and the arts, by which their ancestors were so renowned, and to bring about that enterprize which reared those stupendous monuments that have resisted the power of time and man to destroy them.

Near Memphis, which was about one hundred miles from the mouth of the Nile, stand the pyramids, which are still the wonder and admiration of the world. The largest, whose base occupies ten acres of ground, is the loftiest work of art in the world, being five hundred feet in perpendicular height. The stones employed in the construction of this enormous edifice are thirty feet in length, and were quarried at a great distance. The machinery used for raising and transporting these enormous blocks is wholly unknown. It is said that one hundred thousand workmen were employed constantly for thirty years in its erection.

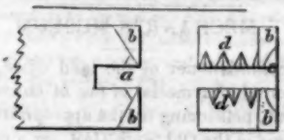
Near the pyramids stands another stupendous work of art, hewn from a rock, known by the name of the Sphynx. It is now so much covered with earth, that the top of its back only is visible, its head rising twenty-seven feet above the sand.

Thebes, celebrated for its hundred gates, was seated about two hundred miles above Memphis. Both these cities were adorned with rare works of art, of great cost and magnificence—specimens of which have been distributed through Europe, and the ruins of many others cover the country in their vicinity.

Pharos, the watch tower of so much celeberity, was situated in the harbor of Alexandria. It was four hundred feet in height, and was reckoned one of the seven wonders of the world; it was destroyed by the Turks.

At Grand Cairo, the present capital of Egypt, are the remains of a majestic castle, said to have been built by Saladin, which contains the ruins of some of the most noble monuments.

Alexandria, long the seat and capital of the Ptolemies, presents many antique ruins of great interest. It was next to Rome esteemed the first city of the world. The most remarkable antiquities at the present are the two obelisks called Cleopatra's Needles and Pompey's Pillar. The two former are about 60 feet high, and consist each of a single stone, seven feet square at the base.



WOOD SCREW MACHINE.

A patent was recently obtained by Mr. Farwell H. Hamilton, of Schenectada, for improvements in machinery for cutting the threads on wood screws, of which the accompanying diagram is a representation. We adopt the description of this machine given by the Journal of the Franklin Institute.

In this machine there are two spindles, each carrying cutting dies; these spindles are placed side by side, and parallel to each other; each of them carries a pinion, that takes into the teeth of a cog wheel placed between them; said cog wheel receives a reciprocating motion from a rack connected with, and moved back and forth by a crank. The opening and closing of the dies, and the receding and advancing of the spindles, to form the thread, are effected as in some other screw machines. In front of the die end of each spindle there is a feeding wheel, with appropriate jaws for receiving and holding the blanks; an oil tube for supplying oil to the dies whilst cutting, is attached by the middle to a rocking shaft, which is connected with one of the spindles, that as they are turned in opposite directions, and as one is advancing and cutting the thread on a screw, and the other is retreating, the oil tube is shifted to supply the oil to the dies that are in the act of cutting. The dies are made in the manner represented in diagram 1 and 2. They have a nick in the end *a*, of sufficient depth to make the thread deep enough, without having the dies came together. They are then filed away, beveling on each side from the nick, excepting the leaving a lip, *b*, *b*, in which there is a countersink, *c*, to enable it to run readily on to the blank. After these dies are put into their places, a tap is run in, which, instead of cutting threads on them, cuts the teeth, *d*, *d*.

Claim.—"What I claim as my invention, and desire to secure by letters patent, is, 1st. The arrangement of machinery which operates the oil tube, and its combination with the machinery which gives to the spindles an opposite and alternate motion, in the manner, and for the purpose, described. 2d. The method herein described of making the cutting part of the dies with teeth instead of a thread, in combination with the lips, as above described."

STEAM BOAT DIAMOND.

The Diamond has been completely renovated, and fitted up in splendid style throughout. She took her place at the wharf on Wednesday, and awaited the clearing of the ice at the gorge below to make the first trip through. We commend this boat to the traveling public, for her safety and convenience, as well as the politeness and attention of her officers. Capt. Flower has command of her again. On Wednesday morning she made a passage up to Troy in 40 minutes, through the floating ice, which shows that she is not deficient in speed.

A QUERY IN PHYSICS ANSWERED.

The following answer to the query of a correspondent of this paper appeared some weeks since in the National Intelligencer. It escaped our notice at the time, and was lately pointed out to us by a friend:

"Query.—Why does solid cast iron float upon the same kind of iron in a state of fusion? Is it because iron expands in a state of fusion?"

Is any fact more notorious than that iron expands with heat and contracts with cold? As its bulk, then, increases with heat, its comparative gravity, (we need not say,) must be less. It cannot be the greater levity of the unfused iron, then, which makes it float upon the melted. But, as a body heavier than tar will float upon it, from its very imperfect fluidity, so the tenacity which iron retains, even when melted, will prevent a heavier substance from sinking into it. Or, in other words, the difference in specific gravity between fused and unfused iron is less than the cohesion of parts in the latter. J.

THE TRUE SUN.

A neat and spirited penny daily, under the above title made its first appearance in New York about three weeks since, and is, we are pleased to learn, rapidly gaining an extensive circulation and advertising patronage. We understand there is a call for it at the depot of Mr. Jones in this city, and hope to see a supply there soon.

THE PRISONS—ONCE MORE.

One week of the session yet remains, and the prison bill has just been reached. What will be its fate we cannot tell, though we trust that it will yet pass in the shape that it came from the committee. We had rather that it should die at once, *die* and be forgotten, than that any of the substitutes proposed by the Lead mine or Stone quarry, by Mr. Senator Bartlitt, or Elam Lynds & Co., should prevail. The first of these men, (stone quarry and lead men,) after discovering that their beautiful project of selling to the state their profit less mines and quarries could not be entertained staightway united forces, discovered that they were the *best* friends of "the mechanics," and with a pleasant smile extended their hands to the dear "mechanics" hoping that the mechanics would give them due credit for their condescension and disinterestedness. *Due* credit they shall have if we can give it them. Credit of a certain kind is indeed due to men who endeavor to avail themselves of a well founded excitement among the mechanics to promote their own selfish ends. Credit is due these men for opposing, openly and boldly opposing the plan suggested and recommended by the mechanics. Credit is due them for changing their song and endeavoring to bood-wink and bamboozle the mechanics when they discoerved that their point could not be carried openly. Credit is due for stuffing Elam Lynds with promises, (for that they have done so is fair to infer from the frequent use of his name in the petition and *ready made* bill these gentlemen so con-

siderately placed before the legislature,) and credit is due Mr. Lynds for representing himself here as a delegate from the mechanics of Syracuse, and then coalescing with men whom we are satisfied, notwithstanding their professions, would be glad to defeat the plan proposed, so that it subserved their interest. Giving these gentlemen "due credit" for all their kindness, generosity, and friendly feeling, we dismiss them with the hope that the legislature will be uninfluenced by their interested projects and selfish representations.

We might show the utter absurdity of the plan proposed by the men above mentioned—how it makes Elam Lynds lord of the lash, irresponsible to any authority, and uncurbed by any restraint. We might show the ridiculousness of its provisions, how utterly impossible it would be to preserve any sort of prison government, and how it would continue the detestable monopoly system, the very worst feature of our prison policy. Take it all in all, nothing can be more absurd, or less satisfactory than this crude project. It will not meet the evil the mechanics wish remedied—it will not subserve the interests of the state, but prove of benefit only to speculators and monopolists. The *middle man* system must not be tolerated, much less continued.

The report of Mr. Bartlitt in the senate next claims our attention. We must say, that while we find no fault with the main positions of that report, we can but express our surprise at some of its conclusions. After saying (refering to the law of 1835) "the general provisions of this law were *just* and *equitable*—and its observance would be salutary and satisfactory," the report continues; "notwithstanding the placing of this law on our statute books, still in 1838,—39, 40, 41, contracts were made and convicts let, for various manufactures, in *plain* and *distinct violation* of the main provisions of this law." The contracts are then named, amounting to twelve in number. Now by the law of 1842 the attorney general is directed to break up these *illegal* contracts, on the first of May next. "What then is to be done," says the report, "with this embarrising question?" The author of the report then concludes, that but three courses remain to be pursued. "First, to repeal the law of last session and all action under it. Second, to make an appropriation sufficiently large to support the convicts without labor. Third, to ratify and legalise the contracts alluded to for the time they have to run." Now without admitting the first conclusion that there are only three courses to be pursued, we protest against taking the first or third, and maintain that there exists no necessity to take the second—at the same time that we express our conviction that the second should be chosen in preference to either of the others.

Shall we repeal the law of last session which merely reenacts the law of 1835, with the addition of some penal enactments to make officers of the state do their duty? Take off the penalties then and let them loose again to make more illegal contracts, and riot free of all restraint? What a solemn farce such legislation would prove! Forbid it decency, forbid it justice.

Shall we on the other hand "ratify and legalize" crimes committed in the face of the laws? Will this legislature *dare* to so insult the mechanics of this state, as to legalize crimes, which have fallen with withering effect on their heads? Will this legislature take it upon themselves to make *wrong*, right—*crime*, justice? We trust not, we hope they have more regard for themselves, more regard for the mechanics of New York.

Again, as to the second conclusion of this report, we say *if necessary*, by *all* means impose a tax upon the *whole* of community, to support the convicts without labor, instead of fastening this prison leech upon the mechanics, for a year or an hour, to drain their life's blood as it has done in years past. If no other course can be adopted, *tax* the mechanics openly, not *rob* them under this specious mask.

MECHANIC'S MUSEUM.

The commissioner of the land office, to whom was referred a memorial of one of our western associations, petitioning for the appropriation of certain rooms in the Old State Hall, for a mechanic's museum, report that there are only two or three small rooms to be had, which are neither large or good enough for the mechanics. How kind and considerate! If the land commissioners only knew how modest we mechanics are, they would probably give us what we asked for without determin whether it was good enough or not. This is an excess of kindness on their part. Killing with kindness indeed! A resolution however has passed the house granting these rooms for our use. The difficulty is, the agriculturists have a resolution before us. So we may in this as in every other matter go whistle!

NAVIGATION OF THE HUDSON.

The Hudson was completely unobstructed by ice to the head of navigation on the 13th instant. The following table shows the dates at which the river closed and opened at Albany, during a period of 25 years.

River closed,	*River opened,*	*Days closed.*
1817 December 7,	1818 March 25	108
1818 December 14,	1819 April 3	110
1819 December 13,	1820 March 25	102
1820 November 12,	1821 March 15	123
1821 December 13,	1822 March 15	92
1822 December 24,	1823 March 24	90
1823 December 16,	1824 March 3	78
1824 January 6,	1825 March 6	60
1825 December 13,	1826 Feb'ry 26	75
1826 December 24,	1827 March 20	86
1827 November 23,	1828 Feb'ry 8	80
1828 December 23,	1829 April 1	100
1829 January 11,	1830 March 15	63
1830 December 23,	1831 March 15	82
1831 December 5,	1832 March 25	111
1832 December 21,	1833 March 21	83
1833 December 13,	1834 Feb'ry 24	73
1834 December 15,	1835 March 25	100
1835 November 30,	1836 April 4	125
1836 December 7,	1837 March 28	111
1837 December 14,	1838 March 19	94
1838 November 25,	1839 March 21	116
1839 December 18,	1840 Feb'ry 21	65
1840 December 5,	1841 March 24	109
1841 December 19,	1842 Feb'ry 4	47

The river *throughout* to New-York has not always been clear of ice on the days above stated. The time when the first steamboat passed from N. York to Albany, or *vice versa*, was, in 1835, March 25; in 1836, April 10; in 1837, March 31; in 1838, March 19; in 1839, March 25; in 1840, Feb. 25; in 1841, March 26; in 1842, Feb. 6. In 1804 the river was closed at Albany until the 6th of April; and in 1807 it opened on the 8th of April. The average time of opening appears to have been, for the whole series of years since 1817, about the 15th of March. The latest period of the season on record at which the river has opened, was the 8th of April (1807). In 1828 the river was navigable through to Albany the whole or part of each month in the year.—*N. Y. Tribune.*

INTELLIGENCE.

The price of wheat at Zanesville, Ohio, has advanced a trifle, and is now 45 cts. a bushel. Flour continues at $2.75 per bartel.

After the 1st of May next, when the New Roura Railroad is to be opened, the mail will reach London from Paris in *twenty* hours.

The Richmond Compiler of Friday says some of the officers of the navy are now in our city for the purpose of inspecting and proving the new cannon cast for government at the Tradegar Foundry. The process of proving has been going on for two or three days past. Wednesday a ball from one of the cannon glanced across the upper part of the Belle Isle and passed through the cotton factory on the opposite side of the river. It passed over the head of one of the factory girls who was sitting at her work. Had she been standing it would have taken off her head.

Opening of Navigation.—The river has been clear of ice except a couple of miles below Albany, for several days. A boat started for New York on Wednesday morning, and remained in sight during the day, plying about among the ice bergs, unable to go farther or return. The Diamond went down on Thursday.

Centrifugal Force.—A Mr. Summers, near Quincy, Illinois, was killed recently by the bursting of the fly-wheel in a steam flouring-mill.

Polished Limestone.—The Martinsburg (Va) Gazette describes specimens of beautiful slabs, taken from limestone quarries of the vicinity, and dressed and polished to a degree that was utterly surprising. The dressing develops a variety in the shades and structure of the stone, that is not at all discernible upon the rough rock. Several citizens have engaged slabs for tombs, centre tables, &c.

It is currently reported that Dr. Morton, of Philadelphia, is preparing a work that will possess an extraordinary interest for the antiquarian and physiologist, on the crania of the ancient Egyptians. He will satisfactorily demonstrate that the builders of the pyramids were Caucasians. This will be an unexpected discovery to the historian, since the opinion has been propagated, from age to age, that the authors of the monumental hieroglyhics were Africans. That they were white men seem now placed beyond dispute by the erudite researches of Mr. GLIDDON; and his assertions, it is said, will be abundantly corroborated by the silent yet essential testimony of a large collection of dry bones, which address the modern philosopher in a language which cannot be misunderstood. —*Boston Md. Journal.*

The following exhibits very nearly the number of ministers in the several denominations in the state of New Hampshire at the present time. Congregationalists 175; Free Will Baptists 124; Methodists 113; Calvinist Baptists 75; Universalists 36; Christians 31; Unitarians 12; Presbyterians 7; Episcopalians 6. In all 579.

On Thursday the 15th ult., General Jackson was seventy-six years old. The Nashville Banner of that date says "his health is good, his spirits cheerful, and he entertains his friends with that hospitality and cheerfulness for which he was remarkable in the meridian of life."

Convicts.—Of the present convicts in the Auburn prison, only 2 have received a collegiate education, 12 an academic—500 could read, 210 could not read, 167 learned to read in prison—450 had been intemperate, 222 moderate drinkers, 54 total abstinenets—370 left home before 16 years of age—235 had been boatmen on canals, 160 sailors, 75 soldiers—310 had practised gambling—123 had attended Sabbath schools, 31 had read the bible daily—357 had been married.

Tea.—The amount of tea exported from China to the United States, during the year ending June 30th, 1842, was 162,323 chests. The amount from that time to the 12th Aug was 10,000 chests. The amount exported from thence to this country during the six years ending June 30th, 1842, was 82,773,341 pounds. If the cost to the consumer was one dollar to the pound, it amounts to $82,773,341—equal to almost half of the entire debt of the states of the Union. Yet we need no assistance from the general goverment, to enable us to drink this sum by the cup full in six years.—*N. Y. E. Post.*

The imports of sperm and whale oil and whalebone into the United States during the month of March past, according to the whalemen's shipping list amounts to 11,242bbls sp. 25,589bbls wh. oil and 278, 028lbs bone. Last year, the imports of oil during the same month, amounted to 9239bbls sp. and 9299bbls wh.

The valuable property belonging to the Taunton (Mass.) Iron Co., consisting of ten acres of land, with water privileges, saw, nail and grist mills. &c. thereon, was knocked down by auction for $30,000!—a sum much less than on sixth part of the original cost. We learn it was bid off by Silas Dean, Esq., for others who are interested in the purchase.

New Railroad Invention.—A patent has been taken out at Paris by M. T. Wroughton, a private gentleman in London, for various important improvements in railway travelling. In the first place, he has a coach so constructed and suspended in its proportions that it cannot overturn, and runs with such smoothness as to occasion no unpleasantness to the traveller and comparatively little friction to the rails. Secondly, he has a new brake of such construction that a child can work it, and which can be gradually or immediately brought into action. Thirdly, the conductor, by means of a spring at his foot, can in a moment when there is danger, detach all the train from the locomotive; and last, but not least, he has invented a beautiful piece of machinery by which the conductor of the first carriage can at any part of the road ascertain the precise rate of speed at which the train is travelling, and so prepare himself for the action of the break or spring so as to aviod all danger to the passengers from the negligence or imprudence of the engineer of the locomotive or any other cause.—*Nat. Intelligencer.*

The Cleaveland (Ohio) Herald states that a Mrs. Towden fell into the fire at that place on the 13th ult. while intoxicated, and was burned to death.

Tapestry.—One of the cartoons of Raphael, in tapestry, the apostolical, 22 feet in length, and 14 in height, made in Brussels upwards of three hundred years ago, is now on exhibition at Amory hall Boston. The original tapestries, 25 in number, of different illustrations, were made at a cost of 70,000 crowns, of which a part only are in existence at Hampton Court, England, and this one in America, which is illustrative of the people of Lystra attempting to offer sacrifice to Paul and Barnabas, as is recorded in the 11th chapter of Acts.

The Rev. M. Abbott, known as the "Sailor's Preacher," has procured upwards of eighteen thousand signatures to the total abstinence pledge, since July, 1841. Of this number six thousand had been drunkards.

Mr. John Schoolcraft, of the Schoharie Hotel, now owns the celebrated dog 'Trouble.' He is four years of age, and weighs *one hundred and sixty and a half pounds!* Who can beat this?

The steam boat J. M. White, from New Orleans to St. Louis, with a large cargo, principally of groceries, struck a snag and sunk on Wednesday, in the Mississippi, about 40 miles above the Ohio. Boat and cargo a total loss. No lives lost.

Our Literary Facilities.—The student of the last century, who pinched and starved his body to procure sustenance for his mind, never in his wildest visions realized the mental banquet which is now within the reach of the laborer. Works which even in liberal England are beyond the means of the journeyman mechanic and the poor professional student, can be obtained here for the price of a single meal. The penny papers, enriched with copious extracts from works of science, history, and fiction, reflect not only the every day scenes of life, accompanied by appropriate comments, but the light of knowledge as it flows from the discoveries, inventions and researches of the luminaries of ancient and modern times.—*True Sun.*

General Jackson's country seat is called the Hermitage; Mr. Van Buren's, Lindenwold; Mr. Clay's, Ashland; and Mr. Webster's, Marshfield.

By felling the trees that cover the tops and sides of mountains (says Humboldt) men in every clime prepare at once two calamities for future generations—want of fuel and scarcity of water.

"*Button, button, who's got the button.*"—Mr. Robinson, of Littleborough, Mass., has "got the button." He has invented a button that will present all the colors of the rainbow, either by sunlight or candlelight.—*Pittsburgh Sun.*

BUSINESS NOTICES.

☞ All letters and communications intended for this paper should be *post paid to secure attention.*

Terms for vol. 2.—To clubs of 20 or more, having the paper sent in one package, $1 each per annum. in advance.

To clubs of not less than 5, sent as above, $1.25 each, in advance.

Single subscribers $1.50, in advance.

Members of the state and county or town associations, subscribing through the secretary, are entitled to the paper at $1 per annum, in advance.

All papers discontinued at the expiration of the time paid for, unless previously renewed.

BINDING.—Subscribers wanting their volumes bound, can have them done in any style and at reasonable prices, by leaving them at this office.

Several volumes of the Mechanic left to be bound some time since are now ready for delivery. The owners are requested to call for them.

TYPE AT REDUCED PRICES.

GEORGE BRUCE & CO., Type founders, at No. 13 Chambers street, near the Post Office, New York, have on hand an unusually large stock of their well known Printing Types, Ornaments, Borders, Rules, &c., of the best metal, cast in original matrices, and very accurately finished, all of which they have determined to sell at

Greatly Reduced Prices.

Placing the Book and Newspaper fonts as follows:

Pica,	32 cts per lb.	Minion,	54 cts. per lb.
Small Pica,	34 " "	Nonpareil,	66 " "
Long Primer,	36 " "	Agate,	88 " "
Bourgeois,	40 " "	Pearl,	120 " "
Brevier,	46 " "		

For approved paper at 6 months, or at 6 per cent. less for cash. Wood Type, Printing Ink, Presses, Cases, Galleys, Brass Rule, Composing Sticks, Chases, and other Printing Materials, furnished with promptitude and at the lowest prices.

☞ Printers & Newspapers who publish this advertisement, with this note, three times, before the first of June, 1843, and send one of the papers to the foundry, will be entitled to payment of their bill on buying four times the amount of it.

Wood Engraving and Designing.

E. FORBES is prepared to attend to all business of the above description at the *Sculpture Rooms* 17 Stanwix Hall.

BOOK BINDING.—HARVEY H. CORNING, sign of the golden ledger, 82 State street, Albany, carries on the above business in all its various branches, viz: PLAIN, EXTRA and SUPER EXTRA—has a first rate RULING MACHINE and other necessary implements for manufacturing BLANK BOOKS of every description, on the most reasonable terms, of the best materials and workmanship.

N. B. An assortment kept on hand. 27.

PRINTING,

IN

ALL ITS DIFFERENT BRANCHES,

SUCH AS

BOOKS, PAMPHLETS, CARDS, CIRCULARS, BILLS, &C.,

Neatly and Expeditiously Executed at the Lowest Prices,

BY

J. MUNSELL,

At the Office of the MECHANIC, No. 58 State street, ALBANY.

WOOD ENGRAVING.

N. ORR, (late pupil of J. H. Hall,) is now prepared to execute any orders in the above business, which he may be favored with, and respectfully solicits a share of patronage.

Room No. 6, 3d floor, Exchange.

Having made arrangements with Mr. N. Orr, to do my wood engraving, I recommend him to the public as one who understands his business and will doubtless give satisfaction.

JOHN H. HALL.

Albany, Feb. 1st, 1843.

LEATHER, OIL, AND FINDING STORE,

No. 18 Hudson Street.

J. HOCHSTRASSER,

Will continue the above business at his old stand, and having made arrangements with manufacturers of Leather and Morocco in the cities of NEW-YORK, PHILADELPHIA, and ALBANY, and having in his employ first rate workmen, he is enabled to supply his customers with all the articles in his line on the most reasonable terms, at *Wholesale* or *Retail*, the following are included in his assortment: Oak and Hemlock Harness, Bridle, Collar, Horse, Trunk, Valise and Skirting Leather; Hog Skins, Philadelphia Russet Bridle, do. Facing Skins, do. Lining Hides, do. Top Hides, Patent Leather, Coach Roans, Neats Foot and Liver Oil, Currier's Tools, Oak Sole Leather, Hemlock do., Wax and Grain Upper Leather, do. Calf Skins, Keen's Philadelphia do., Seal and Kip Skin . Splits and Welt Leather, Cordovan, Red, Green, White and Yellow Linings, Goat and Sheep Binding Skins, White Alum Dressed Linings, Dressed and Undressed Morocco, Colored Goat and Sheep Skins, English Shoe Thread of all numbers, India Rubber and Patent Cloth, Apron Skins, Stock Binding, &c.

N. B. An assortment of SHOE MAKER'S FINDINGS will be kept on hand.

Also, *Roller Skins, Engine Hose, Band, Picker, String,* and *Patent Leather*, on hand and made to order. *Albany*, 1841.

To Cabinet-Makers and Upholsterers.

DANIEL FRY, No. 40 State street, *Importer of Cutlery and Hardware*, keeps constantly on hand a good assortment of HAIR SEATING and CURLED HAIR, together with a complete assortment of *Cabinet Makers' Hardware*, which is offered for sale low for cash or approved credit.

FIRE ENGINES!!

THE subscribers are manufacturing at Waterford, on an extensive scale, Fire Engines of various patterns, to suit purchasers, and they do not hesitate to recommend their Engines as decidedly superior to any now in use.

They manufacture the common Piston Engine, to work with chains or connecting rods, which they have improved in the construction of the brakes and the application of the power, so as to give them a decided advantage over those now in use. They also manufacture Rogers' Patent Balance Fire Engine, which has always been proved to be of *superior* power to all others.

Prices at the Factory, in complete order for use:

Those designed

For 40 men,	largest	Philadelphia	size or	11 inch chambers,	$850
" 28 "	"	Albany	"	8 1-4 "	700
" 22 "	"	Common	"	7 "	600
" 16 "	"	N. York city	"	6 1-2 "	53[illegible]
" 12 "	"	Small		5 1-2 "	450

These prices are one hundred dollars below what engines have formerly been sold for, but they are reduced to suit the times.

The above prices can be reduced $30, by dispensing with the tower and goose neck and passing the water through the forward end of the machine. The *utility* of such an engine is fully equal to any other form, but its appearance is not quite so good. They also manufacture Factory Engines and Forcing Pumps of all sizes; Suction and Leading Hose to order, both rivetted and sewed, of the best quality.

They have been in the business 8 years, and might furnish many testimonials of good workmanship, &c., but as purchasers are supposed to prefer judging for themselves, the subscribers will furnish an engine where desired, and if on trial it is not fully equal in *all* respects to the *best* engines now in use, they will take it away without charge. Having an unlimited water power situated at the head of sloop navigation on the Hudson river, and near the junction of the Champlain and Erie canal, with a rail road connecting east with Boston and west with Buffalo, our facilities and arrangements for manufacturing are such that orders can be filled at any season of the year, and with the greatest promptness and despatch at the lowest rates.

L. BUTTON & Co.,
Waterford, Saratoga Co., N.Y.

MISCELLANY.

THE GRAVE DIGGER.

Not translated from "Der Todlengrabber" or J. W. Kalliwoda.

"Old man! old man! for whom diggest thou this grave?"
I asked, as I walked along,
For I saw in the heart of London streets,
A dark and busy throng.

'T was a strange, wild deed!—but a wilder wish
Of the parted soul to lie
'Midst the troubled numbers of living men,
Who would pass him idly by!

So I said, "Old man, for whom diggest thou this grave,
In the heart of London town?"
And the deep toned voice of the digger replied,
"We 're a laying a gas pipe down!"

London Charivari.

The whole business of life, in short, is merely a series of *ups* and *downs*, and we may all sing, like boys playing "sea saw"—

"Here we go up, up, up,
He we go down, down, down:
Now we go backwards and forwards,
And here we go all aroud!"

It is easier to "kick up a rumpus" then to "put down a riot."

Rogues are "taken up" before the recorder, and "sent down" to the criminal court.

Many a man "sets up for a saint," whom the world "sets down as a sinner."

One who is "up to too many tricks" is very apt to be "set down" for a rogue.

Ten pins are "set up" to be "knocked down," and so are things at auction.

Compositions are usually "set down" on paper before they are "set up" in type.

An actor who is "up in his part" stands a good chance of being "down in the cast."

It is hard to be "hard up" for money, and "run down" by duns.

It is awkward to be "down at the heel," and "up to the ears in debt."

A thing once found out as "not what it's cracked up to be," will never "go down."

When a man is "up in the world," he ought to "come down handsomely."

When it is "all up with a man," he is generally found to be "down in the mouth."

Ups and Downs. Our world has long been celebrated for a variety of ups and downs.

Messrs Editors:—The following piece of drollery I copied yesterday from the walls of the state prison of Rhode Island. It was painted on the walls of a cell by a convict. B.

YANKEE WIT.

From a Providence paper one hundred years old.

A GROCER'S ADVERTISEMENT.

To be sold by Nicholas Branch, at his refectory, west end of the bridge—

Provisions.

Consisting of Bread, Butter, Cheese, Hams, Eggs, Salmon, Neats Tounges, Oysters, &c. ready cooked.

Agitations.

Cider, Vinegar, Salt, Pickles, &c.

Grievances.

Pepper Sauce, Mustard, Black Pepper, Cayenne, &c.

Punishments.

Wine, Brandy, Gin, Spirits, Bitters, Porter, &c.

Supurfluities.

Snuff, Tobacco and Segars.

Any of the above articles to be exchanged for

Necessaries, viz.

French Crowns, Spanish Dollars, Pistareens, cents, mills or Bank bills. Credit for

Payments,

30, 60 and 90 seconds, or as long as a man can hold his *breath.—Journal of Commerce.*

MILLERISM.—The wags are making merry at Millerism. Since the appearance of the "Midnight Cry," one editor announces that he has in addition received a copy of the "Noonday Howl," and the "Morning Yell," and a paper has just made its appearance in this city called the "Vial of Wrath and Junk Bottle of Destruction." It contains a large number of prints, and amongst others, the description of the beast of Daniel, with seven heads and ten horns, together with a chronological calculation as reasonable as Miller's and quite as fanciful. It is as follows:

The beast had seven heads, and ten horns on each head, which makes seventy horns answering to the seventy weeks of Daniel. Now the tail of this beast was 666 feet long, which is the number of the beast. Multiply this by seven, and it makes 4662, which was the age of the world when the first Anti-Christian pope began to reign. Now tie up the beasts tail into three knots, and it will shorten it to 614 feet 4 inches; which being multiplied by three, the number of knots, gives 1843 exactly—the year in which the world will be burnt up. But there is another remarkable coincidence. Martin Luther wore boots with nails in the soles: just 263 nails in both boots, which being multiplied by the seven heads gives 1841. Throw in the two boots, which correspond to Miller and Himes, and it gives 1843.

THE REIGN OF FASHION AT AN END.—The N. York correspondent of the National Intelligencer (N. P. Wills) remarks that by the latest accounts from Paris, *all fashion in gentleman's apparel and outer seeming is at an end.* An attempt having been lately made to re-introduce the fashion of short hair, and to abandon straps and suspenders, (the waistcoat covering the hips) it was fully conceded by the tailors and hair-dressers that among noticeable men there were no three followers of any peculiar style of costume, and that to the great praise of human ingenuity, every dandy in Paris seemed to have worked out his separate idiosyncrasy.

"I would advise you to put your head in a dye-tub," said a joker to a fair haired girl.

"In return, sir, I would advise you to put yours in an oven," was the reply.

My sons, never dispise any person, consider your superior as your father, your equal as your brother, and your inferior as your son.

UNDER OATH.—A certain lawyer in examining a witness concerning a horse, enquired his height. The witness answered, "sixteen feet." On cross examination he was asked how high the horse was. He answered "sixteen hands." "But you just said he was sixteen feet." "Did I? then by gracious, "*I'll stick to it!*"

LINDLY'S PATENT BEDBUG PROOF BEADSTEDS—REMOVAL. The undersigned having removed from No. 29 Green street, to No. 89 Market street, a few doors north of the Eagle Tavern, where they will be happy to see and wait upon their old friends and patrons. To those who have not seen our bedsteads, we respectfully solicit to call and examine them. One year and a half's residence in Albany, during which time we have been in the manufacture of the above bedsteads, enables us to give references to very many of the best boarding and private houses in this city; but we will only give a few of the public houses, where the information can be most readily had: Congress Hall, Franklin House, City Hotel, and Fort Orange. The fact that such houses as above named have been furnished with them, is sufficient evidence of their superiority over any thing of the kind now in use. A description might be given, but we deem it unnecessary, as we trust that under whose notice this may fall, they will at least call and examine them before purchasing elsewhere.

Persons havings good bedsteads that have become loose from use, can have patent rails put to them.

A good assortment of the best and most approved patterns will at all times be kept on hand. For style, workmanship, utility and convenience, we do not intend to be surpassed. Prices to correspond with the times.

TINGLEY & Co. 89 Market st.,

To Printers.—FOR SALE CHEAP, a Fount of second hand Pica, about 200 lbs., in good order. Also a quantity of Leads, of different lengths, as good as new. J. MUNSELL.

TO HOUSE BUILDERS.—FOR SALE—an IRON SCREW AND BOX, suitable to be used in removing or raising buildings. Inquire at Blackall's, corner of Hamilton and William streets. March 18.

PATENT AGENCY AND MECHANICAL ENGINEERING, *Office on F street, between 7th and 9th streets, opposite the Patent Office, Washington City, D. C.*—The subscriber has resigned his situation in the patent office (where he for some time superintended the restoration of patents destroyed by fire in 1836) to devote himself to the preparation of specifications and drawings, and all matters connected with the obtaining of patents for useful inventions either in this country or Europe. His experience in theoretical and practical mechanics, together with an intimate knowledge of the progress of the useful arts and manufactures, at home and abroad, will enable him to judge of the novelty and utility of inventions submitted to his examination; and as patents are not granted, under the existing patent laws, when the alleged inventions are wanting in novelty, or contravene the established laws of science, he will be able to furnish all the information necessary to avoid the expense of making application for patents which could not be granted

Having established a foreign correspondence, he will be able to secure patents in Great Britain, France, and other parts of the continent, or furnish information, and prepare all the necessary papers for that purpose.

A model for a machine or apparatus, or specimens for a composition of matter, are required by law, before a patent can issue; by sending a model or specimens to the subscriber, with a short statement of the object of the invention, the necessary papers and drawings will be prepared and forwarded to the applicant for execution, thereby obviating the expenses consequent upon a journey to Washington, or delay in issuing the patent.

Being well acquainted with the patent laws of the United States, England and France, and the decisions of the courts in patent cases, he tenders his services where information is required in reference to infringements of patents, or defence against suits for infringement, such as compiling and arranging evidence, &c.

To individuals and companies wishing to procure drawings and estimates of machinery, or buildings, for manufactories, on the most modern and improved plans, or any other matter connected with mechanical engineering, he will furnish information; and, should it be required, will locate and superintend structures of this description.

Wishing to be generally useful to mechanics and inventors, he will attend to the sale of machinery and patent rights; this, being a place of resort from all parts of the Union, is perhaps the best location for such a purpose.

Papers relating to patents can be sent to the commissioner of patents, when via luminous, free of postage, and models sent to the collectors of the oprincipal ports, will also come free of expense, and the subscriber can be advised thereof by letter, which in all cases must be post paid. All applications for information relating to patents must be accompanied by a fee of five dollars; charges for other business transactions will be made according to their magnitude. J. JAMES GREENOUGH.

Certificate of HON. H. L. ELLSWORTH, *Commissioner of Patents.*
PATENT OFFICE, NOV. 29TH, 1842.

Mr. *J. J. Greenough*, who has for some years been employed in the patent office, in a highly responsible situation, under the act of 1836, restoring the records, having to my regret tendered his resignation, I take great pleasure in recommending him as a gentleman worthy of confidence, and as being particularly qualified to take charge of any business requiring a knowledge of mechanical science, the progress of the arts, and patent improvements. Mr. Greenough is also well acquainted with the practice of this office. HENRY L. ELLSWORTH.

REFERENCES.—Hon. S. PRENTISS, of *Vt.*, U. S. Senate; Hon. J. P. Kennedy, of *Md.*, U. S. House of Rep.; Hon. John C. Clark, of *N. Y.*, U. S. House of Rep.; Hon. W. Cranch, *Chief Justice, D. C.*; J. W. Hand, Esq., *Chief Clerk, Patent Office*; *C. M. Keeler, Esq., Examiner, Patent Office.*

Encourage American manufacture—under this we prosper.

WEAVER & RICHARDSON, Umbrellas and Parasols made, covered and repaired, in the neatest and most durable style, at No. 66 Green street, Albany, opposite the first Baptist church. N. B. Umbrellas can be furnished by the dozen at short notice. 47

PRINTING.—Every kind of letter press printing will be done to order on short notice at the office of the Mechanic, in the best manner and at reasonable prices. Business, visiting and wedding cards executed in a superior style on an hour's notice. New and fashionable type for books and pamphlets; hand bills of every size and style; circulars, bill heads, &c. &c.

AGENTS WANTED.

Mechanics out of employment may find it a paying business to solicit subscribers for this paper in their vicinities and among their friends. Applications, post paid, directed to this office will meet with attention; they should be accompanied by certificates of character and responsibility.

The following local agents are authorized to receive subscriptions and money for this paper.

Messrs. Wells & Webb, 42 Ann street, New York.

James Hegeman, Troy	P. P. Cleveland, Skeneateles
J. M. Edgerton, West Troy	Chas. White, Auburn
J. B. Gilson, Waterford	Chas. Coy, Canandaigua
Jacob J. Deforest, Schenectady	John Williams, Cazenovia
Andrew Hanna; Utica	Jas. Goddard, Truxton
N. G. Brown, Milltown	M. W. Hemiup, Geneva
J. M. Brown, Cohoes	Luther Moore, Rochester
A. H. Burdick, De Ruyter	T. S. Hawks, Buffalo
E. T. Hayden, Syracuse	Geo. Francis, Waterloo
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W. H. Parker, Cortland Village.	

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